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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,133	11/16/2001	Atsushi Muramatsu	KASAP008	5220

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BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/991,133

Applicant(s)

MURAMATSU ET AL.

Examin r

Lan Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-150)
- 6) ☐ Other: _____

Christopher P. Schwartz
CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu (USP 5,170,998).

Muramatsu shows a pneumatically operated active vibration damping device, as in the present invention, comprising: a first and a second mounting member 16, 22; an elastic body 14 partially defining a pressure receiving chamber 34; an easily deformable flexible diaphragm 58 partially defining an equilibrium chamber 60; a first orifice passage 68; an elastic oscillating plate 40 partially defining an oscillating air chamber 48; a static pressure control mechanism 52, 52a for controlling the pressure in the oscillating air chamber.

Re: claim 2, column 7, lines 33-41 discloses the controlling scheme to control the oscillating air chamber as claimed in present invention.

Re: claim 3, Muramatsu further shows a static working air chamber 62 being controlled by 52a to affect the pressure in the pressure receiving chamber.

Re: claim 4, Muramatsu further shows switching valve 55.

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Re: claim 5, Muramatsu shows in figures 2 and 3 how oscillating plate is being controlled as claimed.

Re: claim 6, column 10, lines 33-40 shows how the vibration is effectively dampened as claimed.

Re: claim 7, Muramatsu further shows restricting member 36.

Re: claim 8, figures 2 and 3 how oscillating plate is being controlled as claimed.

Re: claim 9, Muramatsu further shows a partition member 32 dividing the pressure chamber into primary chamber 34 and auxiliary chamber 46; a second orifice passage 54 for fluid communication between said primary fluid chamber 54 and said auxiliary fluid chamber 46.

Re: claim 10, figure 1 shows the oscillating plate to be fluid tight and the location of said second orifice passage as claimed.

Re: claims 11 and 12, column 10, lines 33-40 shows how the vibration is effectively dampened as claimed.

Re: claim 13, see column 7, lines 33-41.

Re: claim 14, Muramatsu further shows switching valve 55 and the controlling scheme is described in column 10, lines 33-40.

Re: claims 16 and 17, figure 1 shows the second mounting member 22 and the structure of the damping device as claimed.

Re: claim 18, figure 1 further shows pressure transmitting passage 50.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (USP 5,170,998).

Muramatsu's damping device as rejected in claims 1 and 3 lacks a static pressure regulating switch valve and how it is connected to either the atmosphere or the vacuum to control the pressure in the static working air chamber 62. Column 7, lines 14-16 show that 52a is meant to be a second pressure control means. The first control means 52 is described in details in column 7, lines 33-41. It would have been an obvious expedient for one of ordinary skill in the art at the time the invention was made to have modified Muramatsu's damping device to include a static pressure regulating switch valve and how it is connected to either the atmosphere or the vacuum to control the pressure in the static working air chamber 62 as a second control means.

5. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (USP 5,170,998) in view of Muramatsu et al. (USP 6,352,249).

Muramatsu's damping device, as rejected in claims 14 and 19, lack the disclosure of controlling the vibration according to engine ignition pulse being adjusted according to an engine speed. Muramatsu et al. teach in column 19, lines 29-34, that controlling a switch valve to dampen vibration according to engine ignition pulses, data

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stored maps, and engine speeds are old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated engine ignition pulses and engine speed in the controlling scheme to dampen the vibration; since these methods are old and well known as taught by Muramatsu et al.

Response to Arguments

6. Applicant's arguments filed on 2/10/03 have been fully considered. However, it is found that the arguments are not persuasive. Page 2, first paragraph of the response, it appears that the Applicant agrees that Muramatsu discloses the same structural elements as claimed in claim 1. However, Applicant argues that Muramatsu does not disclose the oscillation plate 40 to be oscillated by a periodic change of an air pressure generated in the oscillating air chamber to actively generate a change of fluid pressure in the pressure receiving chamber and actively damp the vibration to be damped based on the change of the fluid pressure in the pressure receiving chamber. In column 7, lines 17-30, Muramatsu shows that the pressure in the air chamber 48 can be changed due to the connection or disconnection of valve 55. By changing the pressure in the air chamber 48, the vibration would be damped depending on the different pressures in the air chamber. The rejection is still deemed proper and is repeated above.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

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April 1, 2003


CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER